

13. (Reiterated) A method according to claim 11, wherein the nucleic acid is selected from the group consisting of DNA, RNA, and a nucleic acid analog.

14. (Reiterated) A method according to claim 13, wherein (a) further comprises the step of engineering the nucleic acid into a recombinant vector.

15. (Reiterated) A method according to claim 14, wherein the recombinant vector is a plasmid, a phagemid, or a virus.

16. (Reiterated) A method according to claim 15, wherein the vector is a preparation of double-stranded DNA plasmids.

17. (Twice amended) A method according to claim 11, wherein the muting transgene sequence is homologous to an endogenous sequence comprising a portion of the endogenous gene selected from at least one of the group of: a 5' untranscribed portion, a transcribed coding portion including introns, a 3' untranslated portion, a 3' untranscribed portion, and a portion that overlaps adjacent ends of at least two portion of the endogenous gene.

18. (Amended) A method according to claim 17, wherein the nucleic acid comprises a sequence homologous to an endogenous sequence located in the 5' portion of the endogenous gene.

22. (Twice amended) A method according to claim 17, wherein the muting nucleic acid comprises a sequence that is homologous to an endogenous sequence located at the 3' portion of the gene.

23. (Reiterated) A method according to claim 22, wherein the 3' portion of the gene includes an untranscribed portion and a portion that overlaps the 3' end of the coding portion.

24. (Twice amended) A method according to claim 11, wherein delivering the muting nucleic acid in (b) is selected from the group of: transforming, transfecting, electroporating, infecting, and lipofecting the nucleic acid into the cells.

25. (Reiterated) A method according to claim 24, wherein delivering the muting nucleic acid comprises infecting the cells with a genetically attenuated preparation of bacteria or viruses.

50. (Reiterated) A composition obtained by the method of claim 11 in a pharmaceutically acceptable carrier.

52. (Twice amended) A composition obtained by the method of claim 25 in a pharmaceutically acceptable carrier.